

Claims

1. A process for recovering disturbed, digital optical signals

converting the disturbed signals are opto-
5 electrically,

passing the electrical, disturbed signals through a feedback decision circuit comprising at least two parallel-connected threshold decision elements,

using the decided signals and an estimated dispersion as the basis for the synthesis of synthetic, dispersive signals.

15 generating an error signal with the disturbed signals
and the synthetic, dispersive signals are used

and using the error signal to derive the setting parameters for setting the threshold decision elements.

2. A process according to Claim 1, characterised in that the analogue control stage determines the error signal (10) in accordance with an analogue procedure.
- 25 3. A process according to Claim 1, characterised in that the analogue control stage operates using the zero-forcing algorithm.
4. A process according to Claim 1, characterised in that
30 a pseudo-error monitor compares the disturbed optical signal with the decided signal and determines a pseudo-error therefrom.
5. A feedback decision circuit with an input for

optically transmitted data reconverted into electronic signals, with at least two parallel-connected threshold decision elements, and with an analogue control stage for determining setting parameters for the threshold decision elements,

characterised in that tappings are provided for deriving the disturbed signal and the decided signal and that the analogue control stage contains a circuit) for determining a synthetic, dispersive signal, and that the synthetic dispersive signal and the disturbed signal are fed to a circuit for determining an error signal and to a circuit for determining at least two setting parameters.

6. A feedback decision circuit with an analogue control stage according to Claim 5, characterised in that the feedback decision circuit with analogue control stage is connected to a linear equalizer.
7. A feedback decision circuit according to Claim 6, characterised in that the linear equalizer standardizes the signal amplitude to 1 and the analogue control stage is reduced to the derivation of the parameter B1.
8. A feedback decision circuit according to Claim 5 with a pseudo-error monitor consisting of a monitor decision element, an EXOR-circuit and a logic circuit.